



**PULSAtron**<sup>®</sup>

Electronic Metering Pump

# Pulsafeeder Expertise

Technology is the key to delivering responsible products to the markets that we serve. Leading the way in the development of metering technologies, Pulsafeeder continues to set the standard for accuracy, reliability and safety.

Innovation is another hallmark of Pulsafeeder. Helping customers find a new approach to an old problem is what we do best.



## PULSAtron Series Pumps

For over 20 years, the PULSAtron product line has evolved into philosophy of design that continues to set the standards for the entire industry. Our engineers have developed a guided check valve system with a proven 'seat and ball' design that ensures reliable and accurate metering year after year.

Our fin cooled Solenoid enclosure dissipates heat ensuring that the pressure handling capability of the pump can be maintained. The thermally protected Solenoid protects the pump from seizing up in extreme heat conditions with an automatic reset feature allowing the pump to resume operation upon cool-down. All PULSAtrons are tested and rated under hot conditions guaranteeing that the flow and pressure ratings meet the specifications.

### Product Specifications

- Flows to 600 gpd ( 94.6 lph) on specific series
- Pressures to 250 psi (17 Bar) on specific models
- Accuracy +/- 2% at max capacity on E Plus, HV and MP Series. +/- 3% at max capacity on A Plus, C, C Plus, and E Series.

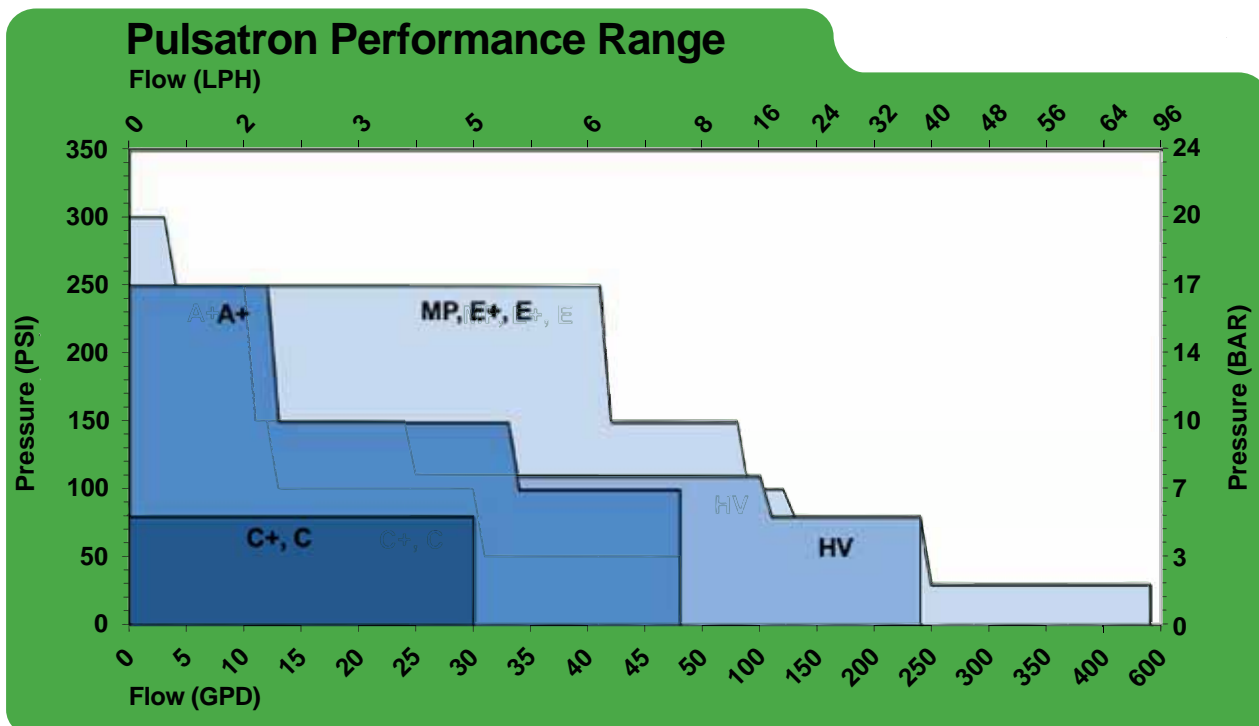
### Materials of Construction

- Housing - PBT
- Head materials - GFPPL, PVC, PVDF, Viton, 316SS
- Seats materials - CSPE, TFE, Viton
- Ball materials - Alloy C, Ceramic, TFE, 316SS
- Diaphragm - PTFE faced CSPE

### Typical Applications

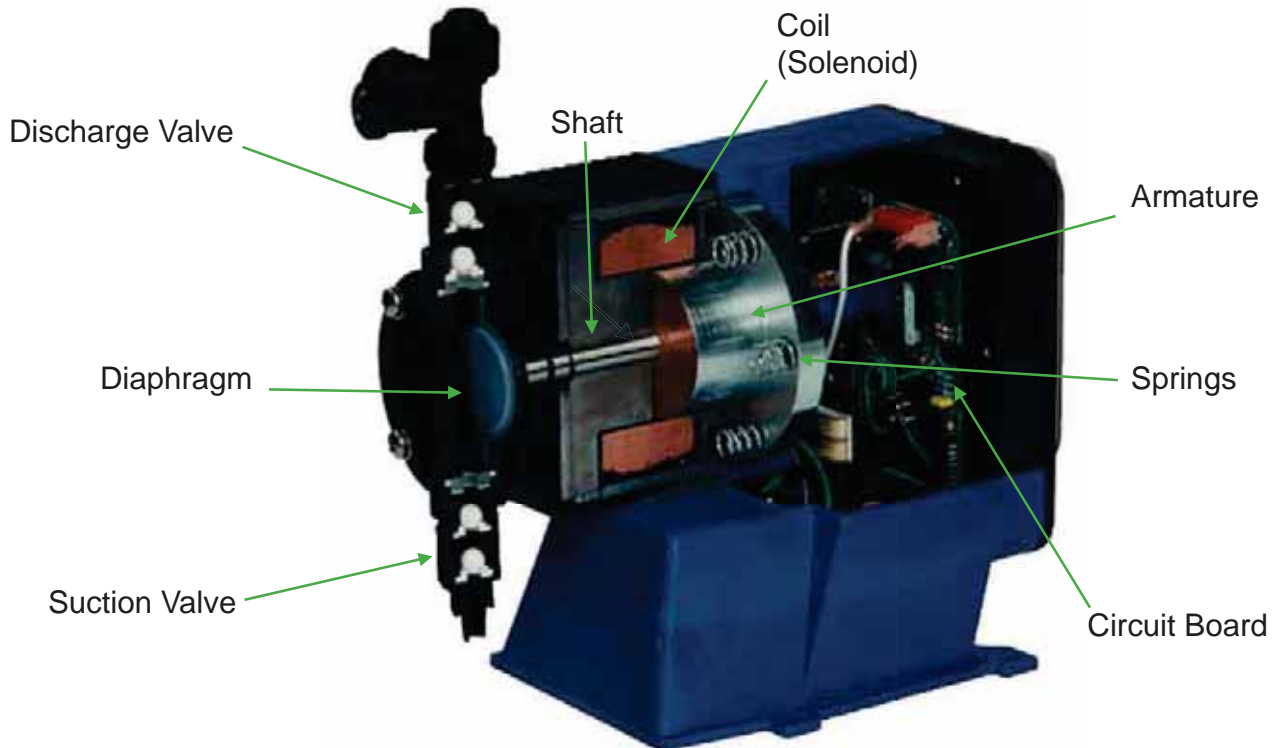
- Car Wash
- Water Conditioning
- Water Treatment
- Ware Wash

CSPE is generic formulation of Hypalon, a registered trademark of E.I. DuPont Company. Viton is a registered trademark of E.I. DuPont Company.



## Diaphragm Metering Pump Technology

The PULSAtron family are solenoid powered diaphragm metering pumps. The key element which differentiates these pumps from other types is the TFE lined elastomer diaphragm. This diaphragm is sealed against the reagent head forming a seal-less, leak free pumping chamber. The solenoid driver is connected to the diaphragm to create the pumping motion. As the diaphragm moves away from the face of the reagent head, it creates a vacuum which closes the discharge check valve and opens the suction check valve, drawing the pumped fluid into the pumping chamber. As the solenoid forces the diaphragm toward the face of the reagent head, the suction check valve closes and the discharge check valve opens allowing the liquid to flow out the discharge valve.



## PULSAtron Configurations



The Pulsatron is available in several different series. Shown here are the Pulsatron MP Series, E Plus Series, HV Series, A Plus, and C Series.

# Features & Benefits



## MP Series

- Automatic control, fully scalable 4-20mADC, 20-4mADC or external pacing
- Manual control allows for a combined 1000:1 turndown
- Flow verification option is available on select sizes
- 16 character LCD display and indicator lights
- Relay and stop outputs
- Simple prompts in plain language and programmable in four languages



## E Plus Series

- 100:1 turn down ratio
- Optional 4-20mA with stop function
- Optional external pacing with stop function
- Auto-Off-Manual selection switch with indicator lights
- Built in circuit protection with easy access panel mounted fuse
- Clear hinged cover over controls for water resistance



## HV Series

- Automatic control, available with 4-20mADC direct or external pacing, with stop function
- Manual control by on-line adjustable stroke rate & stroke length
- Viscosities to 20,000 CPS
- Auto-Off-Manual switch
- Highly reliable timing circuit



## A Plus, C Plus, E Series

- 100:1 turn down ratio
- Water resistant for outdoor installation
- Manual control by on-line adjustable stroke length and stroke rate
- Optional external pacing with Auto/Manual switch on A Plus
- Internally dampened to reduce noise



## C Series

- 10:1 turn down ratio
- Optional automatic control by external pacing with prime switch
- Manual control by on-line adjustable stroke length
- Liquid low level option available to prevent loss of prime
- Internally dampened to reduce noise

## Features & Benefits



### Premium Construction

- Few moving parts
- Optional wet-end materials
- High Viscosity handling
- Long life diaphragm
- Leak free design



### Bleed Valve Assembly Standard

- Safe & easy priming
- Durable and leak free



### Guided Ball Check Valve System

- Dual ball check with TFE seats
- Reduce back flow
- Outstanding priming characteristics



### Highly Reliable Electronics

- Timing circuit
- Rated hot for continuous duty
- Thermal overload



### Automatic Degassing Technology

The unique degas valve system is designed to allow air to be vented from the pump head while minimizing the return fluid volume. This allows the pump to be totally self-priming which eliminates the need for a bleed valve. The degassing head also prevents the pump from losing its prime due to gas build up, especially in applications where the pump is run intermittently with long off times between runs.



### Proportional Process Control

The PULSAtron series metering pumps offer a wide variety of process control inputs.

- 4-20mA inputs for metering control with water meters and PLC's.
- Dry contact pulse inputs for use with PLC's and dry contact water meters.
- External remote stop input that can be used with a level wand for low chemical level control.

# Controls, Options and Systems

## Automatic Control

- External/remote pacing, with stop available on E Plus, HV, MP Series
- External pace with auto/manual selection available on A Plus and C Series
- Flow Verification available on MP pumps 100 psi or less



## Integrated Tank System

Available on all PULSAtron models

- 15 gallon tank
- Bulk head assembly
- Flow indicator
- Float assembly
- Pump mounting plate

## Pre-Engineered System and Panel Mounted Systems

Available on all PULSAtron models

- Pre-Configured system
- Easy to install and operate
- Mounting flexibility
- Quick delivery
- Designed for harsh environments



## Valve Options



## Five Function & Five Function De-Gas Valve

- De-Gas - Bypass gasses and fluid with Five Function De-Gas Valve
- Back pressure
- Anti-Siphon
- Air bleed
- Discharge drain
- Pressure Relief with Five Function Valve

## Valves

Optional Valves available

- Double ball standard with TFE seats
- Spring loaded
- NPT connections
- Metric connections
- Ceramic, Stainless and TFE balls
- CSPE, Viton, and TFE seats

# Typical Installation

Typical Installation Includes:

- Tank
- Calibration Column
- Pulsation Dampeners
- Pressure Relief Valve
- Pressure Gauge

All Available through Pulsafeeder!



# Parts & Accessories



## KOPkits

When you need a part, you've got it. A KOPkit can help you cut downtime and put you back in business fast.



## Calibration Kit

Calibration columns are used on the supply side of the pump to permit flow calibration.



## Pump Shelf

Designed to safely and securely mount your metering pumps on a wall or level surface and contain any potential spills.



**Pulsation Dampeners** improve pump system efficiency by removing pulsating flows from positive displacement pumps.



## Corporation Stop

Pulsafeeder's high quality brass corporation stop and nozzle assembly disperses chemical into the center of a line for even mixing.



**Pressure Relief Valves** prevent an over pressurization situation from ever damaging your pumps or pipes. Over pressurization can occur when a valve is closed or a blockage occurs. They are always recommended equipment for any pump or skid system.



## Solution Tanks

Available in sizes from 15 to 500 gallon.



**Solenoid Valves** are used to permit and shut off fluid flow.

Contact your local Pulsafeeder Distributor or Pulsafeeder Technical Services at 800-333-6677

pulsafeeder.com